

REMARKS

Applicant respectfully requests reconsideration of the application in view of the above amendments to the claims and the following remarks and enclosed declaration under 37 CFR § 1.131.

ELECTIONS/RESTRICTIONS:

In the Office Action mailed 10/28/2003, the Examiner required affirmation of the provisional election made with traverse during a telephone conversation on July 15, 2003 between the undersigned and Examiner James Arnold to prosecute the invention of Group I, claims 1-17 and 25-38.

In confirmation of the telephone election made on July 15, 2003, Applicant elects with traverse to prosecute the invention of Group I, claims 1-17 and 25-38. Applicant reserves the right to file one or more divisional applications encompassing the subject matter of the invention of Group II, claims 18-24 and reserves the right to traverse an election requirement in any continuing application that is filed from the present application.

STATUS OF THE CLAIMS:

Claims 1-17 and 25-38 are elected.

Claims 18-24 are withdrawn from consideration.

Claims 1, 10, 25 and 33 are currently amended.

Claims 1-38 remain pending.

Claim 39 is new. Support for new claim 39 is found in Fig. 6 and in paragraph 40 of the specification.

OBJECTION TO THE DRAWINGS:

In the Office Action mailed 10/28/2003, the Examiner objected to the drawings as (i) failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: exhaust duct 27 from page 9, line 9 and tubes 18' from page 9, line 29; and (ii) failing to comply with 37 CFR 1.84 (p)(4) because reference character "A" has been used to designate both a height and a cross-section.

Applicant has amended Figures 2, 3 and 5 in response to these objections. Specifically, in Figure 2, reference characters "A" used to designate a cross-section are replaced with "3". In Figure 3, reference number "27" is added and in Figure 5, reference number "18" is replaced with "18' ". These amendments to the drawings were not made for reasons relating to patentability. No new matter has been added by way of these amendments.

SPECIFICATION CORRECTION

A typographical error is corrected on page 9.

REJECTIONS UNDER 35 USC § 102(e) and 35 USC § 103(a):

In the Office Action mailed 10/28/2003, claims 1-7 and 9-32 are rejected under 35 USC § 102(e) as being anticipated by Barnett et al. (US 6,237,545 B1); claims 33-38 are rejected under 35 USC § 102(e) as being anticipated by Gibson et al. (US 6,241,855 B1); claim 8 is rejected under 35 USC § 103(a) as being unpatentable over Barnett et al.; and claim 34 is rejected under 35 USC § 103(a) as being unpatentable over Gibson et al.

These rejections are respectfully traversed on the ground that the cited references are not effective references against the pending claims pursuant to the provisions of Rule 131. Applicant conceived the claimed invention prior to July 20, 1999, and thus prior to the effective dates of Barnett et al. (US 6,237,545 B1) and Gibson et al. (US 6,241,855 B1), and also prior to the effective filing date of Gibson et al. (US 6,264,798 B1), and diligently pursued both actual and constructive reduction to practice of the invention from a date prior to the effective filing dates of these patents until the filing of this Application, as evidenced by the facts set forth in the enclosed Declaration of Brian Jay Doerksen. Further, neither Barnett et al. (US 6,237,545 B1) nor Gibson et al. (US 6,241,855 B1) nor Gibson et al. (US 6,264,798 B1) claims the same patentable invention within the meaning of Rule 131 (a) (1).

Applicant points out that the claims, as presently amended, recite that the horizontal tubes are arranged in a plurality of vertical columns and are horizontally and vertically offset from one another. This horizontal and vertical offset results in a “staggered” design that provides a number of particular advantages, *e.g.*, it permits manipulation of heat flux between groups of tubes; permits positioning of the tubes so that more of the heat transfer to the tubes is radiant; permits reduction in height and volume of the fire box or radiant heat section of the furnace; and other benefits as described in paragraphs 24-28 of the specification.

Accordingly, Applicant respectfully submits that the rejections under 35 USC § 102(e) and 35 USC § 103(a) should be withdrawn.

CONCLUSION

Applicant respectfully requests consideration of the foregoing amendments, remarks and enclosed Declaration and requests reconsideration of the application and withdrawal of the objections and rejections. Applicant believes this reply to be fully responsive to each ground of objection and rejection raised in the Office Action mailed 10/28/2003. If this belief is incorrect, or if a telephone conference would facilitate the resolution of any issue, the Examiner is invited to telephone the undersigned or her associates at the telephone number listed below. Please charge any fees or apply any credits to Deposit Account Number 16-1575, ConocoPhillips Company, Houston, Texas.

Respectfully submitted,

Date: April 27, 2004

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